

IN THE CLAIMS:

Please amend the claims to read in full as follows:

---

1           1. (Amended) A method of eliminating parasitic bipolar transistor action in a Silicon on  
2 Insulator (SOI) Metal Oxide Semiconductor (MOS) device located in a logic circuit, said logic  
3 circuit being adapted to receive an input signal and a clock signal, the method comprising:  
4           controlling the conduction of an active discharging device with the input signal, said  
5           active discharging device being coupled to an intermediate node of said logic circuit,  
6           whereby the parasitic bipolar transistor is deactivated.

1           2. (Amended) The method of claim 1, wherein the SOI device comprises a gate and a  
2 drain, and wherein the method further comprises:  
3           providing a first signal to said gate of said SOI device;  
4           providing a second signal to said drain of said SOI device; and  
5           activating the conduction of said active discharging device according to the state of said  
6 first signal.

1           3. (Amended) The method of claim 2 wherein the first signal is said input signal.

1           4. (Amended) The method of claim 2 wherein said first signal causes said SOI device to  
2 conduct current whenever said logic circuit is being pre-charged.

1           5. (Amended) The method of claim 2 wherein the second signal pre-charges said drain  
2 during a pre-charge cycle.

1           6. (Amended) The method according to claim 1, wherein the active discharging device  
2 provides a conduction path between said intermediate node and a voltage source.

1           7. (Amended) A method of eliminating parasitic bipolar transistor action in a Silicon on  
2 Insulator (SOI) Metal Oxide Semiconductor (MOS) dynamic logic circuit having an input, an  
3 output, a clock, an active discharge transistor, and a plurality of stacked SOI Metal Oxide  
4 Semiconductor (MOS) transistors interconnected to define a common node and an intermediate  
5 node, wherein:

6           said plurality of stacked SOI MOS transistors is controlled by a plurality of inputs;

7           said common node is coupled to a pre-charging device;

8           said intermediate node is in a path between said common node and a voltage source, said  
9 path defined by said plurality of stacked SOI MOS transistors;

10          said intermediate node is coupled to said common node by at least a first of said plurality  
11 of stacked SOI MOS transistors; and

12          said active discharging transistor is controlled by at least one of said plurality of inputs,

13          said active discharging transistor defining a discharge path between said intermediate  
14 node and said voltage source,

15 the method comprising:

16          controlling the conduction of said active discharging transistor during a pre-charge cycle;

17 and

18          actively discharging said intermediate node, whereby the parasitic bipolar transistors are  
19 deactivated and the charge at said intermediate node is maintained at a predetermined level.

1           8. (Unchanged) The method according to claim 7, wherein pre-charging occurs during a  
2 low state of said clock.

1           9. (Unchanged) The method according to claim 7, wherein pre-charging occurs during a  
2 high state of said clock.

1           10. (Unchanged) The method according to claim 7, wherein during the pre-charging all  
2 said inputs are set to a predetermined logic state.

1           11. (Unchanged) The method according to claim 10, wherein said logic state is low.

1           12. (Unchanged) The method according to claim 10, wherein said logic state is high.

1           13. (Unchanged) The method according to claim 7, wherein the step of actively  
2   discharging said intermediate nodes prevents the body voltages of said stacked SOI transistors  
3   from reaching a voltage stage sufficient to activate the parasitic bipolar transistors of said stacked  
4   SOI transistors.

91  
1           14. (Unchanged) The method according to claim 7, wherein said stacked transistors are  
2   N-Field Effect Transistors (NFET) and said active discharging transistors are P-Field Effect  
3   Transistors (PFET).

1           15. (Unchanged) The method according to claim 7, wherein said stacked transistors are  
2   P-Field Effect Transistors (PFET) and said active precharging transistors are N-Field Effect  
3   Transistors (NFET).

1           16. (Unchanged) The method according to claim 7, wherein said pre-charging device  
2   comprises transistors coupled to said stacked transistors.

---

Please add the following new claims:

1 17. (New) A method of reducing the effects of parasitic bipolar transistor action in a  
2 silicon-on-insulator (SOI) logic circuit during a pre-charge cycle, comprising:  
3 coupling an active discharge device to an intermediate node of the SOI logic circuit; and  
4 controlling the conduction of the active discharging device using a non-clock signal,  
5 whereby the charge at the intermediate node is maintained at a predetermined level during the  
6 pre-charge cycle.

1 18. (New) The method of claim 17, wherein the predetermined level is a common ground  
2 potential for the SOI logic circuit.

1 19. (New) The method of claim 17, wherein the non-clock signal comprises an active  
2 low signal applied to an input of the SOI logic circuit during the pre-charge cycle.

1 20. (New) The method of claim 1, wherein said input signal is a non-clock signal.

1 21. (New) The method of claim 6, wherein the voltage source comprises a system  
2 ground.